AMSAT News Service Weekly Bulletins
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SB SAT @ AMSAT $ANS-092.01
AMSAT-OE SPONSORS SEMINAR

HR AMSAT NEWS SERVICE BULLETIN 092.01 FROM AMSAT HQ
SILVER SPRING, MD APRIL 2, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-092.01

AMSAT-Austria Sponsors Space Education Seminar 16-APR-1994 In Innsbruck

The AMSAT-Austria group (AMSAT-OE) will announce their first Educational Development Seminar meeting using the amateur radio satllites AO-21 and DOVE (DO-17). It is most fitting that these satellites will be used to broadcast the announcement of this meeting because the theme is the advancement science education through use and observation of OSCARs. Look for the announcement from DOVE beginning on 15-APR-1994 in its telemetry broadcasts and look for the synthesized voice message from AO-21 this week.

The meeting will take place on 16-APR-1994 at the Technical Highschool of Innsbruck, Austria and is being sponsored by the Department of Electronics and Telecommunication. The presenters planned will be OE1VKW, DG2CV, and EA2CLS/KB7HTA, and I2KBD. All of these radio amateurs are well know in educational circles. They have a lot of interesting information for those in attendence. All are invited to join AMSAT-OE at this seminar. For more information, contact Wolf Hoeller (OE7FTJ) at his INTERNET address of uibk.ac.at.

[The AMSAT News Service would like to thank Wolf Hoeller (OE7FTJ) for this bulletin item.]

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SB SAT @ AMSAT $ANS-092.02
OPERATING TIPS FOR AO-27

HR AMSAT NEWS SERVICE BULLETIN 092.02 FROM AMSAT HQ
SILVER SPRING, MD APRIL 2, 1994
TO ALL RADIO AMATEURS BT
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N8QGC & N4TPY Offer Some Operating Suggestions For AMRAD-OSCAR-27 (AO-27)

N8GQC has been working staions on AO-27 all the way from his Detroit area QTH to as far away as Mexico City, Mexico, Baffin Island, and the North West Teritories. He notes that these are great contacts for a Low Earth Orbiting (LEO) satellite. In his discussions with the AO-27's ground control station station operator N4TPY, N8GQC has put together a list of "good operating practices" that N4TPY would like all those who use AO-27 to follow:

1. Please use as little power as possible. It is recommended that you use your H/T when possible. If not, then use no more then 25 Watts ERP.

2. Please try to be kind to other satellite operators. The object should be to make as many contacts as you can, and to step on as few as possible.

3. The satellite has no set schedule of availability at this time. The

control stations will make it available only on weekends during daylight passes. Sometimes during the week AO-27 may also be on, but it will be "hit or miss."

N8QGC has worked AO-27 with a very simple set up. He transmits on the uplink frequency of 145.850 MHz using a homebrew 1/4 wave vertical antenna. His total uplink power is 10 watts. N8GQC find that this gives him a very strong signal into the satellite. But he especially wants hams to know that he has also worked AO-27 using a H/T with a "rubber-duck" antenna and 2.5 watts output! However, receiving this satellite can be somewhat difficult. N8QGC uses a KLM 440-6X antenna to receive. This is the the same 6 element UHF YAGI that he uses for transmitting on AO-21 when he isn't communicating through AO-27. AO-27's downlink can be heard on on 436.800 MHz. N8QGC is in the process of experimenting with several different receiving antennas. For mobile operations using AO-27 he has tried using his full-wave 70CM antenna on the car but has noted that doesn't work very well. On the receive side, he reports, it still takes a 6 element Yagi antenna.

By keeping the above suggestions in mind, all users of AO-27 will be able to enjoy it to its fullest capabilities.

[The AMSAT News Service would like to thank N8GQC & N4TPY for this bulletin item.]

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SB SAT @ AMSAT $ANS-092.03
SATELLITE W.A.E.Z.S. AWARD

HR AMSAT NEWS SERVICE BULLETIN 092.03 FROM AMSAT HQ
SILVER SPRING, MD APRIL 2, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-092.03

Worked All European Zones by Satellite (W.A.E.Z.S.) Award Available

AO-10 and AO-13 user Mario Di Iorio (IW6BNC) is active from his QTH in Macerata located in the center of Italy, grid square JN63RH. Mario is also the manager of W.A.E.Z.S (Worked All European Zones by Satellite) Award. Mario reports that very few radio amateurs know of the existence of this award. The European zones are: 14, 15, 16, 20, and 40. The award is divided into a bronze, silver, and gold award. The follwing is the criteria for each catagory:

1) The basic award or the "Bronze" award can be obtained with a single QSO with any radio amateur station in Macerata, Italy and 3 European zones.

2) The "Silver" award can be obtained with making contacts with 4 European zones and 1 operator from Macerata, Italy.

3) The "Gold" award can be obtained with 5 European zone contacts plus one contact from any station in Macerata, Italy.

The follwoing are the only valid amateur radio operators from Macerata. And they are are: 1) IK6LMB, 2) IW6BNC, 3) IK6MQM. Send your requests for this award to:

W.A.E.Z.S AWARD MANAGER
c/o A.R.I. MACERATA
P.O. BOX 66
62100 MACERATA - MC ITALY

and please include 10 IRCs.

The orginal QSL cards are not needed as proof of confirmation of the contacts but only a list of QSOs containing all the details of the contacts between the stations involved. This award is valid for a single satellite but it changes with respect to the different modes of operation, e.g., SSB, CW or a mix of the the two modes. IW6BNC hopes to see many stations striving to obtain the W.A.E.Z.S award. If you have further questions about this award and its rules, direct your inquiries to:

Mario Di Iorio (IW6BNC)
P.O. Box 66
62100 Macerata - MC
Italy

Or you can send IW6BNC a packet message to his local packet radio BBS of IW6BNC @ IW6BET.MC.ITA.EU.

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SB SAT @ AMSAT $ANS-092.04
LATEST ZRO TEST NOTES

HR AMSAT NEWS SERVICE BULLETIN 092.04 FROM AMSAT HQ
SILVER SPRING, MD APRIL 2, 1994
TO ALL RADIO AMATEURS BT
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WA5ZIB Offers The Some Observations On The Recent AO-13 ZRO Tests

The current round of ZRO Tests via AO-13 are complete. No tests were missed and all went well. Some interference was experienced on the February 19th test, but it was not critical. The tests of February 19th and 26th were completed just prior to AO-13's switch to Mode "S" with no time available for discussion with participants after the tests. These ZRO tests were scheduled very close to the mode-switch time due to a minor error in predictions made months in advance. The February 26th test was begun a few minutes early to ensure that all levels would be sent prior to mode switch. Many thanks to those on the AO-13 AMSAT Operations Net that identified the potential schedule conflict before it became a problem.

No new Z9 reports have yet been received, but there's plenty of time to send in submissions. There is no charge for copy verification although an S.A.S.E. is appreciated. Send your copy to: Andy MacAllister (WA5ZIB), AMSAT V.P. User Services, 14714 Knights Way Drive, Houston, TX 77083-5640.

More tests will be scheduled during the next season of Nadir pointing for AO-13. The dates will be posted to the AMSAT News Service (ANS).

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SB SAT @ AMSAT $ANS-092.05
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 092.05 FROM AMSAT HQ
SILVER SPRING, MD APRIL 2, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-092.05

Weekly OSCAR Status Reports: 02-APR-94

AO-13: Current Transponder Operating Schedule:
M QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Mar 19-Apr 04
Mode-B : MA 0 to MA 90 |
Mode-BS : MA 90 to MA 120 |
Mode-S : MA 120 to MA 122 |<- S beacon only
Mode-S : MA 122 to MA 145 |<- S transponder; B trsp. is OFF

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Mode-S  : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 |        Blon/Blat 180/0
Mode-B  : MA 180 to MA 256 |
Omnis   : MA 230 to MA  30 | Move to attitude 235/0, Apr 04 240/0, Apr 04
[G3RUH/DB2OS/VK5AGR]

FO-20: The following is the current schedule for transponder operations:
       ANALOG MODE:
      6-Apr-94  6:45 -to- 13-Apr-94 7:10 UTC
      20-Apr-94  7:35 -to- 27-Apr-94 7:55 UTC
      11-May-94  6:54 -to- 18-May-94 7:20 UTC
  Digital mode: Unless otherwise noted above.
  [Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

AO-21: N8QGC has been working AO-21 from Detroit QTH and notes that AO-21
       is operating normally.  It is on the following schedule: 5 minutes of FM
       repeater operation followed by 4 minutes of WEFAX transmissions.  Fin-
       ally, the cycle is conclued with 1 minute of packet before switching
       back to FM repeter mode.  [N8QGC]

AO-27: AO-27 now acting as a 'J' mode FM transponder and is proving very
       popular in Europe, with increased activity daily. It has a strong ex-
       cellent quality downlink that can easily be heard on a hand-held receiver
       on 436.800 MHz +/- some 10 KHz of shift Doppler shift correction.  It's
       sensitivity is far greater than 'B' Mode on AO-21.  If there are no QRO
       stations on 145.850 MHz (+/- some 3 KHz of Doppler shift), uplinking us-
       ing a hand-held which can produce 2 watts ERP is capable of putting an
       excellent full quieting signal into the transponder.  As evidence G3IOR
       has worked several other European stations using 2.5 watt hand-held
       dual-band transceivers and for optimum footprint coverage to VE8DX who
       was running just 3 watts into a ground plane omni-directional from Baffin
       Island.  All were fully quieting signals! [G3IOR]

STS-59: A brief reminder that STS-59 is scheduled to be launched on 07-APR-94
        at 12:07 UTC and will carry the Shuttle Amateur Radio Experiment
        (SAREX) payload.  For complete details, please refer back to the
        $ANS-071.02 bulletin.

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly
OSCAR status reports.  If you have a favorite OSCAR which you work on a
regular basis and would like to contribute to this bulletin, please send
your observations to WD0HHU at his CompuServe address of 70524,2272, on
INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO
area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM.  Also, if you find that the current
set of orbital elements are not generating the correct AOS/LOS times at
your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL.  The information you
provide will be of value to all OSCAR enthusiasts.

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